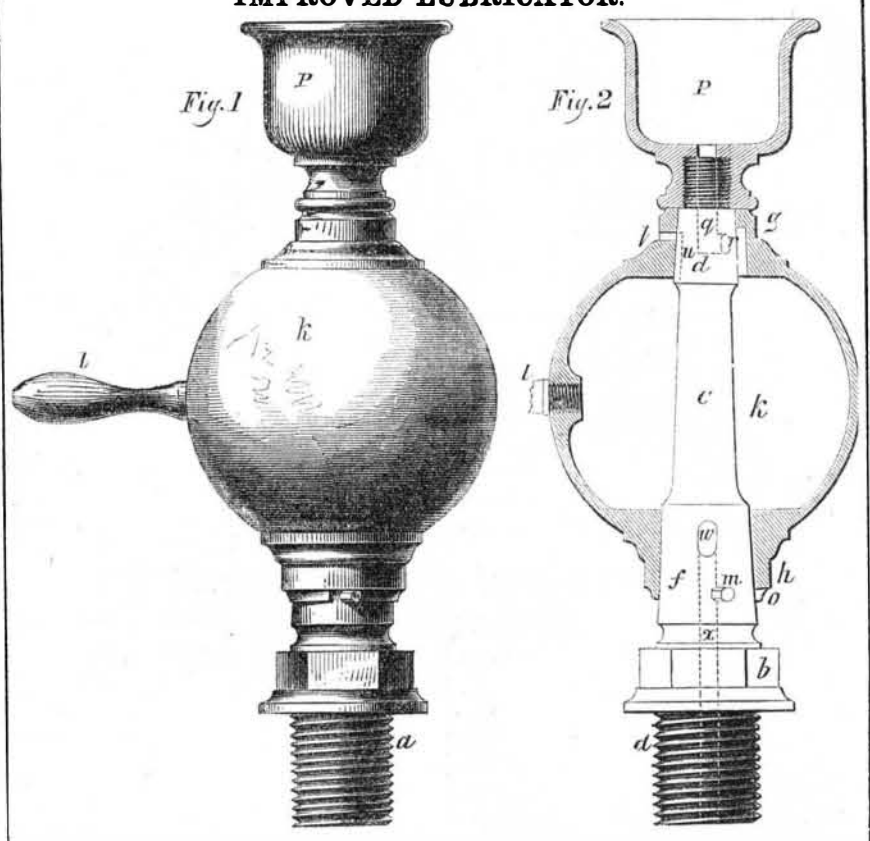
Scientific American.

NEW YORK, FRBRUARY 3, 1855.

The Age of the World.

A question of great importance with divines and men of science at the present day, is that of the age of our planet, and the different changes which have taken place upon it, as related in Genesis. One class contend that the different acts of creation took place exactly as described in the first chapter of Genesis, in six solar days, and that all things were made out of nothing in that time. Another class believe that our planet was in existence for thousands of years prior to the first act recorded in Genesis, that it had undergone vast changes, and that it had been long in confusion, and was bereft of life, when the command went forth "Let there be light." This class also believe that the successive acts described in Genesis took place in six common days, furnishing the world with the exact orders of creation as there described. Another class believe that the successive acts of creation mentioned in Genesis, took place in the exact order there described, but that instead of the days there mentioned being solar days, they were *indefinite periods of time*—some of them of great length—perhaps sixty thousand years. This latter class embrace the greatest number of learned geologists and divines. In the last number of the *Bibliotheca Sacra*, the Rev. John O. Means, of East Medway, Mass., presents his views at great length on this subject, and takes the latter view of the question, namely: that the days mentioned in the first chapter of Genesis, if interpreted to mean *indefinite periods of time*, would reconcile both science and the Scriptures in every particular. He employs some strong arguments in favor of this view of the question. Thus, the sun, moon, and stars, are said to be created on the third day, therefore, the two previous days could not be one of our solar days, embracing one revolution of the earth on its axis in twenty-four hours, with the sun to rule the day and the moon to rule the night. This argument is incontrovertible. But what was the cause of light before the sun was created. He sees no difficulty in this. He says, "the material universe is full of light, ready to be worked at a word. Chemical action on a vaster scale than man can follow, is taking place every moment, and floods of light are poured forth. Combustion is attented with light as well as heat." "It may sound strange," he again says, "to say that the most intense light is to be found, not *on* the earth, but *in* it. The whole of the sun's rays which reach the earth, gathered to a focus, would not be so intensely light as the center of the globe. It seems pretty certain that within the crust of the earth, is a globe of fire, at least two thousand miles in diameter." This opinion costs neither him nor any man of science anything whether it be true or false, but he departs from reason and logic, by endeavoring to establish one hypothesis by setting up another. There are no positive proofs of the earth being a crusted ball of fire. We are not dependent on the sun for light, as he has clearly stated, but he does not seem to understand its true theory. It is produced by the vibrations of a subtile medium diffused throughout space. Our planet is self-luminous, but in a degree less so than the sun, for there is one glory of the sun, another of the moon, and another of the earth. Man's eyes are constructed to see objects only by a great quantity of intense light; but some beasts and fowls have their eyes constructed to range the forest and field by night as freely as man does during day, while during sunlight they can scarcely see at all. A tribe of Africans also—the Bosjesmen—remain in their caves during day, and search for their food during night. From habit, we presume, they have become nocturnal roamers—men-owls—thus showing that natural light belongs to our planet; the unceasing throbbings of its particles produce continual light; this was the way, no doubt, that light was produced in the early days of the earth. Hugh Miller brings forward some strong arguments in favor of the great age of our planet, and mentions a number of geological changes requiring tens of thousands of years to accomplish, which could not have taken place in the short period of six thousand years, as is believed by those who adhere to the solar six days interpretation of the Genesis narrative of the creation. Sir Charles Lyell believes that it must have taken 67,000 years to form the delta of the Mississippi, and 35,000 years for the Niagara river, to form its present channel from the Falls to Queenstown. Nearly all the eminent geologists believe this, and they consider they have facts to prove it, so strong, that they cannot be gainsayed. Mr. Means reasons strongly to prove that the meaning of the word day in the first chapter of Genesis is an indefinite period of time, and makes out a very strong case in favor of the world being perhaps a million years of age, according to the Mosaic account of creation.

IMPROVED LUBRICATOR.



The annexed figures represent an improvement in apparatus for lubricating the valves and pistons of steam engines, for which a patent was granted to Joshua Regester, on the 5th of last December.

Figure 1 is an outside elevation; and figure is a vertical section of figure 1. The same letters refer to like parts.

The nature of the invention consists in combining the reservoir for containing the oil, or lubricating fluid, with a central conical spindle or stem, by means of two sockets or bearings, one of which is at the upper, and the other at the lower part of the reservoir. In these sockets there are passages corresponding with other passages or vents in the central stem, and are opened and shut by moving the reservoir around the central stem. One of the upper passages or vents controls the admission of the oil into the reservoir, while at the same time the other passages of the upper socket permits the air to escape from the reservoir while the oil is being poured into it. And the passage in the lower part of the reservoir and central stem controls the admission of the oil into the place to be lubricated. These passages are so placed relatively to each other, that when the upper passages are open, the lower passages are closed, it is therefore impossible for both sets of passages to be open at one time, which precludes the possibility of the contents of the reservoir being forced out by the pressure of the steam, which would take place were both the top and bottom passages open at the same time.

The apparatus is secured by screwing the shank, *a*, into the steam chest, or other part of the engine or machine requiring internal lubrication, and to facilitate this purpose, the part, *b*, is made with flat sides, upon which the jaws of a wrench may take hold. In figure 2, C is the central stem, of which *d* is the upper, and *f* the lower conical bearing, these bearings fit accurately into their respective sockets, *g* and *h*, of the reservoir, *k*, which is moved around a central stem by means of the projecting handle, *l*, which is screwed into the reservoir, *k*. The extent of the motion of the reservoir necessary for opening and closing the several passages is regulated by the stud, *m*, and may be about one-quarter of a turn: a portion of the socket, *h*, is removed so as to present the two shoulders, *n* and *o*, to come against the stud, *m*, and thus limit the vibration of the reservoir, *k*; if on bringing the shoulders, in contact with the stud, *m*, the upper passages should be open, then will the lower passages be shut, but on reversing the position of the reservoir, and bringing the shoulder, *o*, into contact with the stud, *m*, then will the lower passages be opened and the upper passages be closed, in which case the oil or fluid within the reservoir will pass down through the central stem into the cavity of the machine requiring lubrication.

In filling the reservoir with the oil or lubricating fluid, it is first poured into the cup or funnel, *p*, from which the oil or fluid passes to the reservoir, *k*, by means of the vent or opening, *q*, which first passes centrally down through the stem till it meets the lateral vent or opening, *r*; when the opening, *r*, is opposite the slot, *s*, as shown in figure 8, the oil flows from the cup or funnel, *p*, into the reservoir, *k*. But when this receiving passage between the oil cups, *p*, and the reservoir, *k*, is open, there is also open the small vent, *t*, through the side of the socket, *g*, for the escape of the confined air, which would otherwise prevent the ingress of the oil or other fluid to the reservoir. This vent, *t*, is also brought into communication with the reservoir by means of the slot-form passage, *n*, cut out of the side of the upper bearing, *d*. The oil or fluid within the reservoir, *k*, passes off to the cavity of the machine requiring to be lubricated by passing down through a slot from a passage communicating with the opening, *w*, in the side of the lower bearing, *f*, and connecting with the central perforation, *x*, in the lower part of the stem, C.

The advantages of this improved lubricator over those which have separate cocks, and requiring separate manipulations, consist in its compactness of form, certainty of operation, and simplicity of movement, the mere revolving of the reservoir around the central stem answering all the purposes of opening and shutting the air cock, the receiving cock, and the discharging cock, and that, too, without error or mistake.

More information may be obtained by letter addressed to Clampitt & Regester, proprietors, No. 53 Holliday street, Baltimore, Md.

Saleratus in Bread.

In the N. Y. *Tribune* of the 24th ult., there is a sensible article by Dr. Alcott, of Auburn Dale, Mass., on the use of saleratus—in which he presents a number of facts to prove that the use of saleratus for domestic baking is dangerons to health and life, and that it has caused death in many instances. He mentions the case of a number of students at Williamstown College, Mass., who boarded in the house of an indigent female that used saleratus very freely in cooking, to make puddings, &c., light, which he believes led to the breaking out of a fearful disease among them, by which two died. Drs. Sabin and Smith, of that place, attributed this disease to the saleratus in their food. He also states, that in a family of about ten persons, it is not an uncommon thing, in many places in Massachusetts, to use about a pound of saleratus per month. He believes that sub-inflammation of the alimentary canal is produced by the free use of this alkali, both in children and adults, and that of the 300,000 children under ten years of age, who die annually in the United States, at least 100,000 might survive but from the effects of saleratus.

From his statements it appears to us that those whom he describes as using saleratus for cooking, to make light biscuits, puddings, &c., do not use acid with it, but simply the saleratus. Now this alkaline substance will not make light biscuit unless it is used with an acid or some kind. The soda and acid unite, setting the carbonic acid gas in the saleratus free, thus producing effervesence—not fermentation—which raises the dough and makes the bread spongy, leaving a bitter salt in the bread, (the tartrate of soda, if tartaric acid is used with the saleratus). There must be great danger indeed, in such a free and ignorant use of saleratus, without an acid, as a pound per month in any family. It is a common thing, however, in the country, to use sour milk with the saleratus, and there is not so much danger in its use when so combined, but, we must say, that saleratus, and those combinations of chemicals which merely produce effervesence, and not vinous fermentation, should not be used in cooking. Experience is the only way to tell what is good and what is evil to use as food or drink, and so far as our experience goes, and we have paid close attention to it for the past three years, we must conclude that yeast alone should be used for *raisings* in domestic cookery.

Wood Gas Controversy.

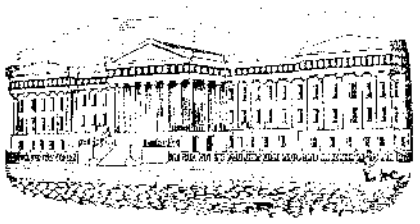
We perceive that Prof. C. G. Page, attorney for Dr. McConnel, publishes a long advertisement in the Washington *Sentinel*, relative to the claims of his client, and Lieut. Porter's for making gas from wood. An engraving with the specification of Lieut. Porter's patent will be found on page 37, this volume of Scientific American, where his full claims are presented and the whole truth of the matter set forth. All who wish proper information on this subject will find it there.

The Ericsson.

This ship, we perceive, is still reported to be getting in her new steam engines, which have been substituted for the hot-air ones. It is supposed that she will be ready for sea about the middle of next month, as 150 men are employed on her. The old proprietors, who were said to have asserted, "they were perfectly satisfied with the success of the hot-air engines," are the proprietors still, thus showing a liberal consistency in all their changes.

Locusts.

Dr. Gideon B. Smith, of Baltimore, says the seventeen year locusts will make their appearance this year along the eastern coast of Maryland, and to Carlisle, Pa., and also in Kanawha, Va., and Lexington, Ky. They can be found in all the above places, wherever trees, shrubbery, or forests grew in 1838, by digging down one or two feet. For more information on this subject, see Dr. Smith's illustrated description of this locust, on page 212, vol. 6 Scientific American.



[Reported Officially for the Scientific American.]

LIST OF PATENT CLAIMS

Issued from he United States Patent Office.

FOR THE WEEK ENDING JANUARY 23, 1855.

HERNIAL TRUSSES—W. M. Bonwill, of Camden, Del. : I do not claim the hinges, F F. the adjustability of the pads or the form of the hoop separately ; but I claim the combination of the peculiarly formed hoop with the umbilical pad and strap, for the purpose of preventing the movements of the body from displacing the pad in either umbilical or in inguinal hernia, as set forth.

GAS HEATER—W. F. Shaw, of Boston, Mass. : I am aware that argand burners and some fire places have their flame or fuel chambers supplied with an internal and external currents of air. I therefore do not claim the mere application of a means of applying air externally to a flame or mass of fuel in a chamber, although in my apparatus I accomplish this ; but while I obtain such an advantage from an external current of air when let into the chamber, C, I secure a further effect, viz., that of supplying air to the surplus chamber or reverberatory dome, F, it will be seen that the chamber, C, has an important relation to the surplus chamber in the gas burning apparatus.

I therefore claim the arrangement and combination of the air pipe, A, the perforated distributor, B, the air chamber, C, the flue pipe, E, and its surrounding chamber of combustion or reverberatory dome, F, provided with an outlet pipe at or near its lower end, the said reverberatory dome or chamber being made to operate in connection with both the internal and external air ducts and for burning the surplus or volatile products, as specified.

ROLLERS FOR CORRUGATING SHEET METAL.—S. G. Booth, of New York City : I do not claim making the rollers of adjustable sections, for the purpose of repeating bending operations upon a piece of sheet metal ; nor do I claim making rollers of two or more parts.

But I claim making the swages and dies for forming beams of wrought iron of numerous thin sections, so that one, two, or more sections can be removed to produce beams of different forms, for the purpose of saving the expense and inconvenience of a multiplicity of pairs of swages and dies, all substantially as set forth.

HAY MAKING MACHINE—G. A. Brown, of Middletown, R. I. : I claim the construction of a machine in manner and form as described, or in any other manner or form substantially the same, applying the power directly from the driving wheels to the spreading apparatus, thus saving the loss of power caused by friction in a series of wheels, using coiled or spring teeth, and the application of such machine to the purpose of spreading and turning hay.

INSTRUMENT FOR CUTTING OUT STONE—H. J. Brunner, of Nazareth, Pa. : I claim cutting out slate or other stone from quarries by means of a cutter stock, B, provided with cutters, D D, and having a reciprocating motion given it by means of a toothed wheel, P, in which pinions, ● N, are made to gear alternately in consequence of the arrangement of the teeth on the periphery of said wheel, P, as shown, said cutters, D D, having the proper feed motion given them by the pawls, F' F, ratchets, E' E', pinions, E E, and racks, C C, or other substantially equivalent device operating as set forth.

[See notice of this invention in No. 17, present Vol. SCI. AM.]

ROLLERS FOR CURTAINS—D. H. Chamberlain and John Hartshorn. of Boston, Mass. : We do not claim the application of a torsion spring to one end only of a curtain roller. But we claim our improved manner of applying the spring to the curtain roller, that is, extending it axially entirely through the roller and its two journals. and affixing it to the roller, and both its brackets (or journals extended from and fastened to them) substantially as specified, such not only affording advantages of which a long spring has over a short one. but also important facilities in applying the spring or modifying its tension as occasion may require.

CARRIAGES—George R. Comstock, of Manheim, N. Y. : I claim the employment of fills in combination with a pole, which pole has attached to it an elliptic spring, capable of a motion around the pole, to which spring, as well as to the fills, the draught animals are to be attached by the harness, substantially as set forth.

I also claim the arrangement of the fills by which the space between them can be enlarged or contracted to adapt it to one or two horses, as may be required, the same to be effected by a right-angled elbow on the rear end of each fill, having several bolt holes through which it can be bolted to the frame work of the carriage, the fill turning as on a pivot in a loop, attached to the outward extremity of the said frame work, substantially as set forth.

Also the combination of the united fills, pole, and elliptic spring with a carriage for the purpose and in the manner substantially as set forth.

CARRIAGE SEATS—G. R. Comstock, of Manheim, N. Y. : I claim the method of adjusting the load carried in two-wheeled vehicle so as to keep the pressure upon the animal drawing the same, equal or nearly so, whether the carriage be moving upon level or uneven ground, by shifting the seat or upper body backward or forward, using an axis with toothed quadrants operating upon toothed racks attached underneath said seat or body (or by the use of any mechanical equivalent) said axis being manouvered by a lever which passes up through the arm of the seat or upper body, substantially as set forth, the said mechanical apparatus being in combination with the carriage body and seat.

LOOMS—James Eccles, of Philadelphia, Pa. ; I claim moving and holding the picker forward in movable shuttle boxes, for the purpose of stopping the shuttle thereby, and causing the picker, after having stopped the shuttle to recede, substantially as described and for the purpose set forth, by the action of the lever, A, and pin, E, or their equivalents.

MEANS FOR HOLDING WINDOW BLINDS—H. A. Frost, of Worcester, Mass. : I claim the application to window blinds of a semi-circular spring rod which may bear upon a wide staple beneath the blind which acts upon it at all times, as described, so that the blind may be retained in any desirable position.

MARQUETRY—L. F. Groebl, of Philadelphia, Pa. : I claim the marquetry described, in which the different pieces of which it is composed, are firmly united at their adjoining edges, so as to secure the advantages described. But I make no claim to the invention of tonguing and grooving, nor to forming an ornamental design or style of decoration, by making combinations of wood of various forms or colors.

HOT AIR FURNACE—Michael Greenebaum, of Chicago, Ill. : I claim the arrangement of the cylinder, l, in the drum, k in combination with the perforated partition, n, and the pipes, p q r, and valve, s, for the purpose of regulating and equalizing the radiation of heat of hot air furnaces, substantially as set forth.

CUTTING AND GRINDING VEGETABLES—Wm. H. Harn, of Carlisle, Pa. : I claim a slicing or cutting apparatus, consisting of a cylinder armed with knives, and working in connection with stationary knives, substantially as described, in combination with a crushing or grinding apparatus, substantially such as described, or the equivalent thereof, the whole being so constructed as to slice the fruit or vegetables and then crush or grind them in the same machine, as described.

BOOK BRACE—Wm. Ives, of Buffalo, N. Y. : I claim the combining with the brace the pointed spring bolt and spurs, substantially in the manner and for the purpose described.

I also claim the application of the adjustable slide to the brace, substantially in the manner and for the purpose set forth.

LIFTING JACKS—S. G. Jones, of Fitzwater Town, Pa. : I do not claim either of the three parts, A B C, irrespective of their relation and adaptation to each other.

I claim the peculiar manner which I combine the main post, A, the sliding piece, B, and the bent lever, C, the fulcrum of the said lever, C, being placed near the lower end of the main post, and its weight point, e, adjustably connected with the sliding piece, B, by means of the holes, f, near the lower end of the said sliding piece, whilst the upper end of the same piece is adapted to slide within the loop, c, formed on the upper end of the main post, all as and for the purpose described.

ROLLING IRON SHUTTERS—Chas. Mettam, of New York City : I do not claim as new or irrespective of the relative position of the protruding arch, and the description of shutter to which the described form of slat refers, giving a slat a curved or arched form to increase strength, as a different disposition of the protruding arch and combination of curves have before been used in blinds otherwise arranged than to roll up.

Nor yet do I claim as new in itself, causing the edges of the slats in rolling shutters to have a broad flat bearing or lap, the one over or upon the other to exclude dust, &c., as the ordinary flat slat rolling shutter possess that feature.

But I claim the rolling metal shutter, operating as described making the slats of the form substantially as specified, that is to say, with an exterior protruding arch, a, at their center combined with flat laps or bearings, b, at their edges, the slats being arranged in relation to each other, and united together essentially as set forth, by which configuration the shutter may be rolled up in a less compass, the labor of rolling up reduced, and the many other advantages set forth.

[In No. 9, Vol. 10, SCI. AM., may be found a description of this invention.]

METAL FOLDING MACHINES—Daniel Newton, of Southington, Conn. : I claim the application to folders (for sheet iron, tin, copper, &c.) of three or more pairs of steel fingers, all of the same shape, one half of which are fastened to the plate which turns the fold, and the other half secured in a hollow underneath the same, the whole acting together, thereby drawing and holding the plate firmly on the metal whilst the fold is turning.

I also claim the gauges attached to the plate by which the width of the fold is regulated, substantially as described.

MACHINES FOR WASHING PAPER STOCK—H. W. Peaslee, of Malden Bridge, N. Y. Patented in England Sept, 20, 1854 : I do not claim as new the revolving screen cylinder, and stationary trough, with or without elevating hooks or lifters, arranged spirally or otherwise in the cylinder for the purposes specified, nor yet otherwise than as arranged and combined, the oblique curbs or pieces to direct the discharge from the cylinder, as such devices, differently arranged, employed, and combined, have before been used in ore washing machines.

But I claim, in the washing of paper stock, the arrangement substantially as shown and described, of the oblique curbs, K, in continuous succession round the open discharge end of the revolving screen cylinder, and forming channels between them to conduct the stock continuously, as the cylinder rotates beyond the discharge edge of the cylinder, when combined to operate together with elevating hooks, d, within the cylinder, and serving to retain a copious supply of water in the cylinder for the proper washing of the stock, and to cheek the run of the stock through the cylinder to a speed in accordance with the conveying action of the cylinder or its elevating hooks, d, as specified, to insure the full and regular action of the hooks on the stock, in the manner described, the whole operating together as and for the purpose set forth.

[This is a valuable invention, which has been patented in several foreign countries.]

FIRE ENGINES—A. W. Roberts, of Hartford, Ct. : I do not claim the brakes and levers ; neither do I claim the valves or cylinders.

But I claim the arrangement of the valves of pumps for fire engines, and other purposes, in the manner substantially as described.

Also the arrangement of the compound brake and levers, substantially as set forth and described.

COMPOUND RIFLING MACHINE—E. K. Root, of Hartford, Conn. : I claim the method of giving the motion to the cutter stocks for giving the increasing twist, by means of the connecting rod or its equivalent turning on a fixed center, and describing a circle at the point of its connection with the cutter carriage which moves in a tangent line, substantially as specified.

I also claim combining a series of cutter spindles with the said connecting rod or its equivalent, by means of a sliding rack connected with the said rod, and engaging pinions on the said spindle, substantially as described.

I also claim in combination with the mandrels that carry the barrels, the slide, and its appendages, to act upon and turn the mandrels, in combination with the dogs for locking and holding the barrels during the rifling operation, the said dogs being operated by the said slide, substantially as specified.

I also claim the mode of operating the series of stops to insure an accurate adjustment of the series of cutters, substantially as specified.

And finally, I claim the adjustable crank pins for operating the cutter carriage in combination with the mode of forming the connection of the connecting rods with the carriage by means of slides governed by adjusting geared screws, substantially as specified, as a means of adapting the machine to the rifling of barrels of various lengths without the necessity of changing the relations of the mandrels, and the stops for setting the cutters, as set forth.

APPARATUSES FOR SUPPLYING FURNACES WITH PULVERIZED METAL—Eloy Schmitz, of New York City : I claim arranging within the blast pipe of a furnace or other fireplace another and smaller pipe or tube governed by valves to admit and cut off the blast, substantially as described, when this is combined with the charging tube, also governed by a valve, substantially as specified, so that when the blast is forcing the pulverized substance from the tube within the blast pipe, the blast shall be cut off from the charging tube, and when the charging tube is open for the liberation of the charge the blast shall be cut off by the valves below, as set forth.

And I also claim, in combination with the above, charging and discharging tubes governed by valves, the employment of a branch tube governed by a valve opening to the atmosphere, to prevent the pulverized substances from being held in the charging tube, by any excess of pressure which may be due to the entrance of the blast during the time the valves of the discharging tube are opened, as set forth.

And I also claim, in combination with the discharging and charging tubes, the employment of the conductor, and the punch rod, substantially as described and for the purpose set forth.

FEEDING MORTISING MACHINES—R. P. Benton, of Rochester, N. Y. : I claim feeding the stuff to be mortised to the cutter, b, in the manner substantially as shown, viz., by means of a rotating screw rod. s, operating upon a slide, R, and an adjustable crank, Q, which gives a reciprocating motion to the slide, X, the above parts operating conjointly, as shown, and for the purpose as set forth.

[See notice of this machine in No. 11, Vol. 10, SCI. AM.]

COMPOUND CROW BAR—I. J. Coles, of Piermont, N. Y. : I do not claim the combination of the two levers, B C, as such a combination is well known.

But I claim the combination of two levers, B C, the latter having a circular projection, G, on its lower side, with the head block, A, in the manner and for the purposes substantially as set forth.

[An engraving of Mr. Cole's crow bar was published in No. 9, present Vol. SCI. AM.]

FASTENING CENTER BITS—A. W. Streeter, of Shelburne Falls, Mass. : I do not claim the invention of a movable or revolving ring, as a means of operating a bit fastening, the same having been previously employed.

But I claim the stationary catch, E, in connection with the cam or bearer, C, for the purposes specified, the whole being combined, arranged, and operated, substantially as set forth.

STEAM MACHINERY—John Sutton, of New York City : I claim, first, arranging the cylinder, B, and piston, C, of the feeder within or in the bottom of the grease reservoir, A, with the cylinder opening directly into the reservoir, substantially as described, whereby the construction of the feeder is simplified, and it is rendered more compact, and provision is made for collecting the sediment within the reservoir.

Second, constructing the feeder with a valve, f, in the piston opening towards the discharge end of the cylinder, and a valve, d, in the discharge end of the cylinder opening against and closing with the pressure of the steam or motive agent, substantially as described, whereby it is caused to be only necessary to move the piston once back and forth to charge and discharge the feeding cylinder, and the lubrication is effected more quickly and with less trouble to the engineer.

[For a description of this invention see No. 11, present Vol. SCI. AM.]

LANTERNS—Lewis Hover, of Jersey City, N. J. : I claim the arrangement of the springs, d d, hooks, e e, and ledges, f f, operated in the manner described, as a fastening to secure the base, B, of the lantern to the other portion of the same.

[This is a small but very pretty invention for the purpose specified.]

IRON WINDOW BLINDS—Henry Blakely, of New York City : I claim the described method of fastening the metal blinds or slats to the frame, by securing their ends or the pivots on which they turn, in the eyes in such manner as will prevent the blinds from being taken out by any force applied to bend them, short of the breaking strength of the several parts, the whole being constructed, substantially in the manner and for the purposes set forth.

[A description of this inventon may be found on another page.]

LOOMS—Geo. Copeland, of Lewiston, Me. : I claim, first, placing the cams, G G G, and G' G' G', which operate the two sets of harness, upon two shafts, F and F', carried by opposite arms of lever beams, K K, which are capable of rocking upon a fixed shaft, D, with which the cam shafts, F' F', are geared, and from which they receive the motion, substantially as described, relatively to each other, to change the operation of the harness.

Second, I claim the method described of securing the lever beams, K K, to maintain the proper position of the cam shafts, for one mode of operating the harnesses, and changing their position for the other mode of operating, by means of a spring or springs, c c, or equivalents, or hook, e, and a disk, N, or equivalent, carrying a stud, k, all operating and acted upon substantially as set forth.

Third, In weaving the closed part of the fabric or bottom of the bag, I claim giving the lever beams a continual rocking movement on the shaft, D, for the purpose of enabling them to be caught by the hook, e, and secured in position for weaving the open part of the fabric, as soon as a sufficient length of closed part or bottom has been woven, and the hook escapes from the stud, k, which holds it during the latter weaving operation.

Fourth, though I do not claim the employment of two race ways in the same loom, with two shuttles which move simultaneously, one leaving its thread in the upper and the other in the lower of two sheds opened one above the other, I claim, for the purpose of throwing and catching the two shuttles simultaneously by pivoting the shuttle boxes to the ends of the lay, substantially as described, so that they may by a vibrating or swinging motion move opposite to the upper or lower race way, as required.

Fifth, I claim the manner described, of operating the two shuttle boxes, so that both may move simultaneously to and from the position for throwing and catching the shuttles, by connecting both with a lever, T, which is arranged to work under the lay, and receives the required motion from a treadle and cam, or other analogous means.

Sixth, I claim the slots in the bars, p p, which form the upper race way, for the purpose of enabling the weft thread which is being carried through the warp, to draw directly or nearly so from the filling point of the cloth or fabric.

[A description of this very important invention may be found in No. 10 present Vol.]

COTTON SEED PLANTERS—Isaac Williams and Isaac W. Bausman, of Alleghany Co., Pa.: We are aware that one or more shafts with teeth have been placed within the hopper, and that a single cylinder, with a series of spirally set teeth has been employed in the throat of the hopper of seed planters, we therefore do not claim these devices.

But we claim the use and combination of two cylinders, placed one above the other, not in the hopper, but in the throat below the hopper, one furnished with a row of long teeth, and the other with a row of short teeth, the teeth on each cylinder being placed helically around it for the purpose of separating and distributing or scattering the cotton seeds in the manner described.

REPEATING CANNON—Saml. Huffman, of Charlestown, Ill. (assignor to himself and D. O. Hare, of Washington, D. C.) : I claim, first, the movable forward section, c, with its flange, g, in combination with the revolving rear sections, i, secured to the plate, d, constructed and arranged substantially as described and for the purposes specified.

Second, the flange, n, in combination with the projection, m, on the plate, a, substantially as described, and for the purpose specified.

Third, the jacket or cold water tank, a2, substantially as described and for the purpose specified.

Fourth, the vent closer, constructed and arranged substantially as described and for the purpose specified.

BUCKETS FOR CHAIN PUMPS—Edmund Morris, of Burlington, N. J. : I claim the combination and arrangement of the gum ring with the cone, substantially as described, for the purpose set forth.

MATCH MACHINE—Leopold and Joseph Thomas, of Allegheny City, Pa. : I claim, first, the use of the sliding carriage with the feed rollers, for the purposes described.

Second, the combination of sliding shelf-shoving head levers, and plungers, for the purpose of packing the finished matches in boxes.

Third, the carrier wheel and roller for applying the phosphoric composition to the matches by machinery.

PADDLE WHEELS—John U. Wallis, of Danville, N. Y. : I do not claim the employment of oblique paddle floats, nor arranging the oblique paddle floats in pairs, in the form of the letter V, otherwise than as described.

But I claim, first, the attachment of the oblique paddle floats, each by one edge only to opposite sides of a wheel, A, or its equivalent, substantially as described.

Second, I claim attaching the paddle boats to the wheel, A, or its equivalent, by hinge joints, for the purpose of enabling them to be adjusted at various degrees of obliquity by screws, a a, or their equivalents, and to adapt their position to the direction of the revolution of the wheel, as set forth.

[A description of this invention will be published as soon as the several foreign patents, which are in progress of procuration are consummated.]

OSCILLATING ENGINES—G. F. Wood, of Ulysses, N. Y. : I do not claim the induction of the steam by the oscillation of the cylinder bringing its ports at proper times into and out of communication with ports in the ends of the induction and eduction pipes or in disks connected therewith.

But I claim the arrangement of the separate induction and eduction valves, I E, communicating with separate induction and eduction ports and passages through the two trunnions, and connected with the same lever, F, substantially as set forth, to move simultaneously and the same distance, for stopping or reversing the engine.

And I also claim transmitting an oscillating motion from the cylinder to the valve lever, F, substantially as described, for the purpose of moving the valves for their ports to meet those of the cylinder trunnions, and thus cause a quick induction and eduction.

]For description of this invention see another page.]

HAND RAILS FOR STAIRS—J. M. Bull, of Sidney, Ohio : I claim joining a series of blocks of wood or other material together, at such angles as will form any circle or curve that may be required, and secure the same together by means of a rod provided with a screw and nut at each end or any other mechanical equivalent, all as represented and for the purpose substantially as specified.

FOUNTAIN PEN—N. A. Prince, of Brooklyn, N. Y. : First I claim the elastic spring unfixed in the feeding tube, whether the said spring be placed under or above the pen, it being so placed that it is made to vibrate by the action of the pen in writing, substantially as described.

Second, I claim the under recess formed by inserting the feeding tube in the lower end of the main reservoir tube, the said under recess acting as a receptacle of the ink which reflows when the point of the pen is turned upward, substantially the same as described.

Third, I claim the combination of the conical part of the piston rod with a conical seat for the same in the screw cap, so that when the piston rod is drawn outward in charging the main reservoir tube with ink, the hole in the screw cap is closed ink and air tight, substantially as described.

DESIGNS.

METALLIC COFFINS—Martin H. Crane (assignor to Crane, Breed & Co.,) of Cincinnati, Ohio.

PARLOR OPEN FRONT STOVES—N. S. Vedder, of Troy, N. Y. (assignor to G. F. Filley, of St. Louis, Mo.)

PARLOR STOVES—N. S. Vedder and Ezra Ripley, of Troy, N. Y. (assignors to G. F. Filley.)

COAL STOVES—Conrad Harris and P. W. Zoiner, of Oincinnati, Ohio.

NOTE—In the above list of patents we notice the names of ELEVEN PATENTEES whose specifications and drawings were prepared at this office. It is gratifying to us to recognize the names of so many of our old friends in the weekly records from the Patent Office ; and it is more than equally pleasing to them, no doubt, to thus receive evidence of their reward for the sleepless nights and days' labor they have spent in conceiving and bringing forth their inventions.

Patent Cases.

STOVES—On the 20th inst., in this city, before Judge Betts U. S. Circuit Court on a trial to recover damages for alleged infringement of a patent granted to Phillip Rollhouse in 1849, for a stove, the jury gave a verdict for the defendant, Alexander McPherson, who set up the defence that the stove which he manufactured was not an infringement of Rollhouse's patent.

MCCORMICK'S REAPER—In Washington, on the 7th inst, we have been informed that C. H. McCormick applied to the Supreme Court for an injunction to restrain J. Manning & Co., of Illinois, from manufacturing reaping machines. It was opposed by the defendants on the ground of the inconvenience of making out a case so far from home, and a formal application made for trial in the Illinois Circuit Court. The rule was granted for the trial in June next—the defendants being required to give bail and security for damages in case an injunction is issued.

A Cure for Scrofula.

Nicholas Longworth, the famous millionaire and wine-grower of Cincinnati, publishes the following cure for scrofula :—

Put two oz. of aquafortis on a plate on which you have two copper cents. Let it remain from eighteen to twenty-four hours.—Then add four ounces of clear, strong vinegar. Put cents and all in a large mouthed bottle, and keep it corked. Begin by putting four drops in a teaspoonful of rain water, and apply it to the sore. Make the application three times a day, with a soft hair pencil, or one made of soft rags. If very painful, put more water. As the sore heals apply it weaker.

P. S. Capt. Harkness, of our city, the first person cured by this remedy, applied it without water, and he informed me that he thought it would burn his leg off; but the next day it was cured. His was a small sore, and had been attended to for months by one of the best physicians, without any benefit. —[Baltimore Sun.

[This may be a very good remedy for this evil. Any piece of copper will answer as well as two cents. The product is simply the nitro-acetate of copper.

Hydraulic Ram Challenge.

Ellis Webb, of Pennsburg, Pa., has sent us a communication in which he proposes a practical test of his new hydraulic ram with any other. He states that he will give $500 if he does not succeed in raising twenty per cent more water by his than any other water ram, in an experiment to be tried in Chester Co., Pa. The elevation to which the water is to be raised must not be less than seventy feet. The condition is, that if he does raise 75 per cent. more water than the best of the others—only one experiment is to be made—he is to receive $500. Any person wishing to offer a greater amount of money, that he will not raise 100 per cent. more water than him, will have the privilege of trial in preterence to those who wish to offer $500, for raising but 75 per cent. The trial is desired to take place as soon in April as possible.

Mr. Webb desires us to publish his challenge for three weeks, and receive propositions and the money or stakes from both parties We have no time to attend to this matter, and cannot receive propositions or stakes; and moreover, our opinions are adverse to challenges, which have the appearance of bets. We, however, would like to see Mr. Webb's hydraulic ram tested with all the others that have obtained any reputation in our country, in order to satisfy us and the public respecting the merits of each. This is the reason why we have noticed the proposition of Mr. Webb.

Preparation for Boots and Shoes.

To one pound of tallow, and half a pound of rosin, melt and add about half an ounce of lamp-black. If the leather is new and dry, moisten it, and apply the mixture as hot as you can bear your finger in it. When the leather once becomes saturated it will be impervious to water, and very durable.